

METHOD FOR ASCERTAINING NETWORK BANDWIDTH
ALLOCATION POLICY ASSOCIATED WITH NETWORK ADDRESS

5

ABSTRACT OF THE DISCLOSURE

10 A network comprises a local group of network
workstations and clients that periodically need access to a
wide area network like the Internet. A class-based queue
traffic shaper is placed in between and enforces multiple
service-level agreement policies on individual connection
sessions by limiting the maximum data throughput for each
connection. The class-based queue traffic shaper
distinguishes amongst datapackets according to their
15 respective source and/or destination IP-addresses. Which
policy is appropriate to enforce is found by placing all IP-
addresses with policies attached to them into an ordered list
of three-byte segment numbers. The least significant byte of
an IP-address is dropped to form a segment number.
20 Classification then depends on finding the IP-address in a
datapacket to the ordered list of segment numbers. If a
match occurs, an index lookup table for the respective
segment allows the least-significant fourth byte of the IP-
address to point to the bandwidth policy to use.

094438.0304
T02080" 8642650